ABSTRACT OF THE DISCLOSURE

A method for scheduling weighted transmissions from two or more transmit antennas of a base station to each of two or more mobile stations in a closed-loop transmit diversity system, whereby the quantity of power available for data transmission from each transmit antenna is determined and, with respect to each antenna, the power required to transmit data to each mobile station is determined. The number of mobile stations that may be served simultaneously by a base station is determined and, for each combination of respective mobile stations constituting the number of mobile stations that may be served simultaneously, the transmission of data from each transmit antenna to the mobile stations is scheduled to minimize unused power.